

PRESENTING COMPLAINS

- ANEMIA — Fatigue, palpitations, paleness, postural dizziness
  - NEUTROPENIA — recurrent fever, sore throat skin rash dysuria
  - THROMBOCYTOPENIA — Gum bleed, bleed from orifice, Bruising, purpura
  - Lumps and bumps and night sweats
  - SPLENOMEGALY — LHC Heaviness
  - HYPERVISCOSITY — bleed, blurring, pruritus
1. Myeloproliferative - Fatigue, LHC heaviness, Bleed, Fevers, blurring and pruritus
  2. CLL - Lumps, low fever and no sweats, Fatigue, Cytopenias
  3. Lymphoma - Lumps and high fever with night sweats
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**RECA (*FOR ALL HEMATOLOGICAL MALIGNANCIES*)**

**1. RISK FACTORS**

- Smoking, alcohol, chronic viral infection, pesticides, chemo radio exposure, epigastric pain

**2. COMPLICATIONS**

- joints pains ( High Uric Acid), Headache, Jaundice ( AIHA, Hepatitis), Effusion, Ascites, frothy urine (MGN), Leg swelling (VTE), Leg weakness ( Paraplegia), Obstruction, Hoarseness, Dysphagia (Compression, Metastatic), Blurring, Tinnitus, Pruritus (Hyperviscosity )
  - Chemo - Headache, Alopecia, oral ulcers,
  - Radio - Skin ulcer, dryness
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**ANEMIA**

- OD
- I - Palm, arms, face, eyes

- P - persistent or episodic, progression
- A - Diet, drugs,
- R - Diet, drugs
- A - Fatigue, palpitations, postural dizziness
- – Recurrent fever, Gum bleeds, Lumps, LHC heaviness, hyperviscosity symptoms

DD

1. Blood loss
2. Hemolytic

- jaundice, recurrent transfusions
- Hereditary ( chipmunk face of thalassemia, leg ulcers hand feet crisis of sickle)
- rheumatology complains
- lumps ( CLL and lymphoma hemolytic anemia)
- Mechanical Heart valve, Drugs
- mosquito bite

### 3. Nutritional, Malabsorption and GIT

- fruit vegetables meat milk
- ice eating, Soil eating, worms
- chronic diarrhea
- Pain, Vomiting, dysphagia

### 4. AOCD ( Anemia of Chronic Disease ) - IBD, CLD, CKD, *joint disease*, Endo

### 5. Hematological malignancy - B symptoms

### 6. Multiple Myeloma ( Bone pain, backache, abdominal pain, constipation, polyuria, Frothy urine )

### 7. Old house, paint, factory

### 8. Aplastic - Chemo, radio

### 9. Chronic infections ( TB, ENTERIC, MALARIA, HIV ) - history of contact, exposure, high risk behaviour, food hygiene

- – IDA specific complains - ice eating, pica, hair and nail changes and nail damage, smooth tongue
- – B12 specific complains - Numbness, imbalance and fall in dark, Memory, psychiatric behaviour

- Presenting complains — Paleness, Jaundice, Stones, Transfusion dependency, Iron overload

### 1. HEREDITARY

- transusion history from early age, family history
- chipmunk face of thallasemia
- leg ulcers hand feet crisis of sickle

### 2. RHEUMATOLOGY HISTORY

### 3. HEMATOLOGICAL

- lumps ( CLL and lymphoma and CML cause hemolytic anemia)
- early morning dark urine - PNH

### 4. MALARIA

### 5. IATROGENIC

- mechanical heart valve
- Drugs
- – – COMPLICATIONS

1. Gall stones, Splenectomy, of repeated transfusions - iron overload — ( joints, skin darkening, jaundice, CLD, DM, CCF, Pituitary)
2. Specific – Bone enlargements for thallasemia, Acute chest syndrome hand feet syndrome for sickle cell anemia
3. According to diagnosis

- Except Anemia, For all other complains of hematology, mnemonic for DD is same. We will ask same set of questions in Bicytopenia, pancytopenia, LHC Heaviness, Lumps and bumps, Gum bleeding/brusing

### MNEMONIC

- **Infections** increase **ALT** in **Virus Infiltration**

### DESCRIPTION OF MNEMONIC

### 1. INFECTION

- Fever, Sore throat, Ulcers, dysuria

## 2. AUTOIMMUNE

- Full history - Joint, Raynaud's, skin rash or tightening, Alopecia, mouth ulcers and dryness,

## 3. LYMPHOMA, LEUKEMIA

- B symptoms ( fever, weight loss, drenching night sweats)
- Hyperviscosity symptoms ( headache, tinnitus, Pruritus, Epistaxis)

## 3. LIVER

- Abdominal Distension, GIT bleed, yellow eyes

## 4. TB TUMOUR HIV

- low grade fever, night sweats, cough, Anorexia, wt loss
- High Risk behaviour

## 6. VIRUSES

- Hep B, C, Flu, EBV

## 7. INFILTRATION

- Sarcoid ( h.o leg wound, dry cough, parotid swelling, facial palsy), Amyloid ( h.o Chronic inflammatory disease TB, RA, IBD, h.o Dialysis)

## 8. DRUGS

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## GUM BLEEDING

- OD
- I - FVCC
- P - persistent or intermittent, progression
- A - Meal, Drug, Trauma, Seasonal
- R - Compression, applying cold, drugs
- A - Nose bleed, blood in cough, vomit, stools, urine, menorrhagia, purpura
- – – **Drowsiness, Headache, seizures, Urine output, hematuria, dysentery, TTP HUS**

- associated Paleness, recurrent fevers, Lumps, LHC heaviness, hyperviscosity symotoms

DD

- **Infections** increase **ALT** in **Virus Infiltration**

DESCRIPTION

1. Post infectious ( Fever )
2. Autoimmune ( Rheumatology)
3. Lymphoma Leukemia Myeloproliferative and myelodysplasia ( B symptoms, bleeding disorder )
4. Liver - CLD, +/- CKD ( distension, jaundice, enceph, – urine volume color frothy dysuria )
5. TUMOUR ( fever, wt loss, anorexia, lumps and bumps )
6. HBV HCV
7. Infiltrative - for example sarcoidosis - ask about Leg nodules, dry cough, parotid swelling facial palsy
8. Drugs ( h.o eating hamburger, Transfusions, Mechanical valve, Hospitalization, Delivery, Heparin, clopidogrel, epival, ATT )

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## BICYTOPENIA

DD

- **Infections** increase **ALT** in **Virus Infiltration** (Add and KIDNEY in this mnemonic)

DESCRIPTION

1. post infectious - B, C, IMN ( high risk behaviour, contact exposure )
2. Rheumatology + PNH
3. Lymphoma Leukemia Myeloproliferative, Myelodysplasia
4. Liver - CLD, Hypersplenism, CKD and NUTRITION
5. TUMOUR TB HIV
6. Infiltration - Myeloma, leukemia, Lymphoma, Mets
7. Marrow failure - Aplastic ( Chemo, radio, Chemicals )
8. Drugs ( Chemo, MTX, Carbamezipine, Carbimazole, Penicillamine )

## PANCYTOPENIA

1. B12
  2. SLE, rheumatological diseases
  3. Hypersplenism
  4. Bone marrow infiltration ( Myeloma, leukemia, Lymphoma, mets )
  5. Marrow failure - Aplastic Anemia
  6. Chemo-radiotherapy
  7. Drugs
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## LHC HEAVINESS

- OD
- I - heaviness, pain, satiety
- P - Intermittent or persistent, progression
- A - Drugs
- R - Drugs, antibiotics
- A - Paleness or fatigue or SOB, Recurrent fever, Gum bleed or purpura or bruising, Lumps, blurring or pruritus
- FV

DD

- **Infections** increase **ALT** in **Virus Infiltration**

DESCRIPTION

1. INFECTIONS
  2. AUTOIMMUNE
  3. LEUKEMIA LYMPHOMA MYELOPROLIFERATIVE
  4. LIVER DISEASE
  5. TUMOUR TB HIV
  6. VIRUSES
  7. INFILTRATIVE ( leg nodules facial palsy cough, old TB)
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# LUMPS AND BUMPS

- OD
- I - Site, Size, Softness, Spread, Skin, Discharge, Pain
- P - Persistent, progression
- A - Alcohol, Drugs
- R - Drugs, antibiotics
- A – Paleness or fatigue or SOB, Recurrent fever, gum bleed or purpura or bruising, Blurring or pruritus
- Fever, Pain

DD

- **Infections** increase **ALT** in **Virus Infiltration**

DESCRIPTION

1. Infections ( ENT, Dental, Upper limb, chest )
  2. Autoimmune ( RA, SLE, Sjogren, still)
  3. Lymphoma
  4. Leukemia
  5. TB, Tumour, **Thyroid**
  6. Virus - HIV, IMN, EBV, Brucellosis
  7. INFILTRATION
  8. Drugs ( phenytoin, allopurinol, Sulfonamides, vaccines)
- – – questions about common malignancies ( Lung, Breast, Colorectal, Hepatocellular, Thyroid, Prostate ) – *this also covers metastasis in these locations*

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